



Kickoff

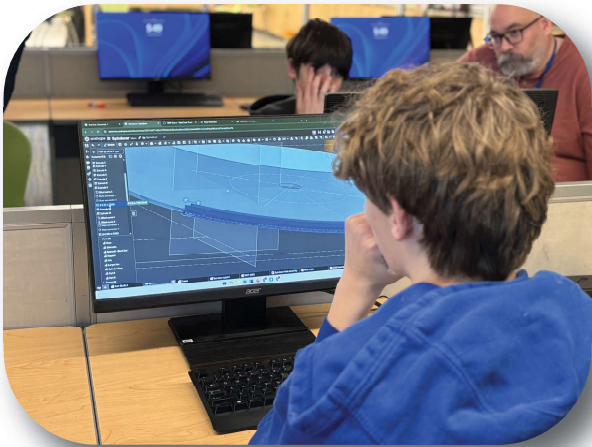
By Athens M.

On Saturday, January 10th, our team met for our annual kickoff meeting. With this meeting, the build season of 2026 has officially begun! The entire team watched the live broadcast, where the new game, REBUILT, was revealed. REBUILT is a shooter game where teams score points by collecting and scoring yellow foam balls called “fuel” into a tall, hexagonal scoring bucket known as a Hub. Robots will be able to climb the Tower at the end of the game for bonus points!

Once the broadcast was done, we split into groups, and went through the game manual. This is done to get a team-wide understanding of the game’s rules, field elements, and design constraints. An interesting part of this year’s game is that, compared to past years, there is no set limit to the number of game pieces the robot is allowed to have at a time. After coming back together to share our findings, students and mentors started strategy discussion.

This year is going to be an interesting one. There are certainly many challenges that come with designing a robot. However, we are extremely excited to watch how it all plays out on the field.





SPONSOR HIGHLIGHT



By Gail B.

This month's sponsor is... DeCicco & Father Construction LLC, a local residential construction company that's been in operation for MA, NH, and ME since 1996. The owner started up the company after he graduated high school, and has made it his goal to provide satisfactory renovations and remodeling for anyone who calls.

"It is my mission to exceed customer expectations while providing the most quality workmanship... I work hard to see the vision of the customer to create a beautiful and functional space that will add comfort and value to your home."

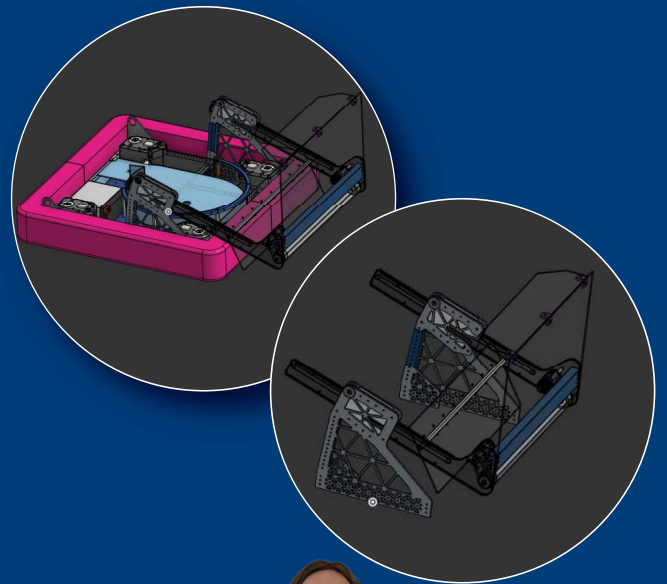


<https://df-construction.com/index.html>

Build Season Check-ins: Design Subteam

By Mason T.

After kickoff, the design team started making simple prototypes for the key elements of our robot. During this time, we focused on answering crucial questions, such as "What is the correct indexer for our robot?" We decided on an indexer that relies on a single mecanum wheel in the middle that, when spinning, pulls the fuel into the indexer and to where the shooter will be. Since then, we've been spending our time on the CAD for the intake and "spindexer," as we're calling it. These systems will be our starting point to see just how simply we can make the best bot possible.



DESIGN LEAD
Mason T.

Mentors Behind the Scenes Interview

By Gail B.

Over the winter break, one of our mentors, Kieran E., went to Tanzania to climb Mt. Kilimanjaro! Below are the details of this exciting experience!

G: How long did you stay in Tanzania?

K: We flew into Tanzania via Qatar in the Middle East on the 28th of December, and then we started our hike on the 29th. It was seven days total, so six days up and one day down.

G: It took six days to climb the mountain?

K: Yes.

G: Well, what was that like? I'm assuming you stopped along the way?

K: We had a total group of twelve hikers, including myself, and then we had an expedition cruise. There were about 55 crew members, which included the people leading the expedition, assistants and guides. There are also people who set up the campsites for us, including tents and sleeping gear. It's so the climbers don't have to carry a ton of stuff and can just focus on getting used to the high elevation, because it's difficult to breathe in.

G: Did you start at the base of the mountain?

K: No. We were about halfway up to start, around 10,000—11,000 feet. We kept our elevation pretty steady going up until the final day before the summit, which we camped out at 15,000 feet. We used that time to get used to the elevation.

G: Were there any issues with the elevation?

K: I experienced Acute Mountain Sickness to a significant degree, actually. So that includes headache, nausea, like I felt sick to my stomach. Some people have a hard time eating, breathing, or sleeping because the body shuts down different systems to cope with the altitude.

G: Oh, wow. That sounds pretty rough. You made it to the top, though?

K: Yeah. One of the hikers got a case of high altitude pulmonary edema and had to go back down, but the rest of us made it okay. Aside from that, the experience was really cool.

G: What was your favorite part?

K: The team bonding, probably. At the start of the journey, nobody really knew each other. There were people from Chicago, Indiana, Colorado, and Utah, but also people from other parts of the world. We had someone from Romania and a couple from Australia, too. It was great because everyone celebrated when things were great and fought through the tough times together. I appreciated that aspect more than anything on the trip.

G: That's really sweet. What about the summit?

K: We started our hike to the top at 11PM at night. Yeah, not the most conventional start time for a hike but the goal was to get to the top right around sunrise. It was about 3 miles to the top, and the fact it took seven hours tells you just how slow we had to go due to the terrain and how thin the air was. But I think it was worth it because that entire night it was a super clear sky and we had a full moon, so I could see where I was going without a headlamp. We got there right as the sun was coming up and it was really great.

From what Kieran was describing, the trip sounds like a once in a lifetime experience that I would love to try some day. I'm really glad that I got this deeper look at the things our mentors have done outside of robotics.

